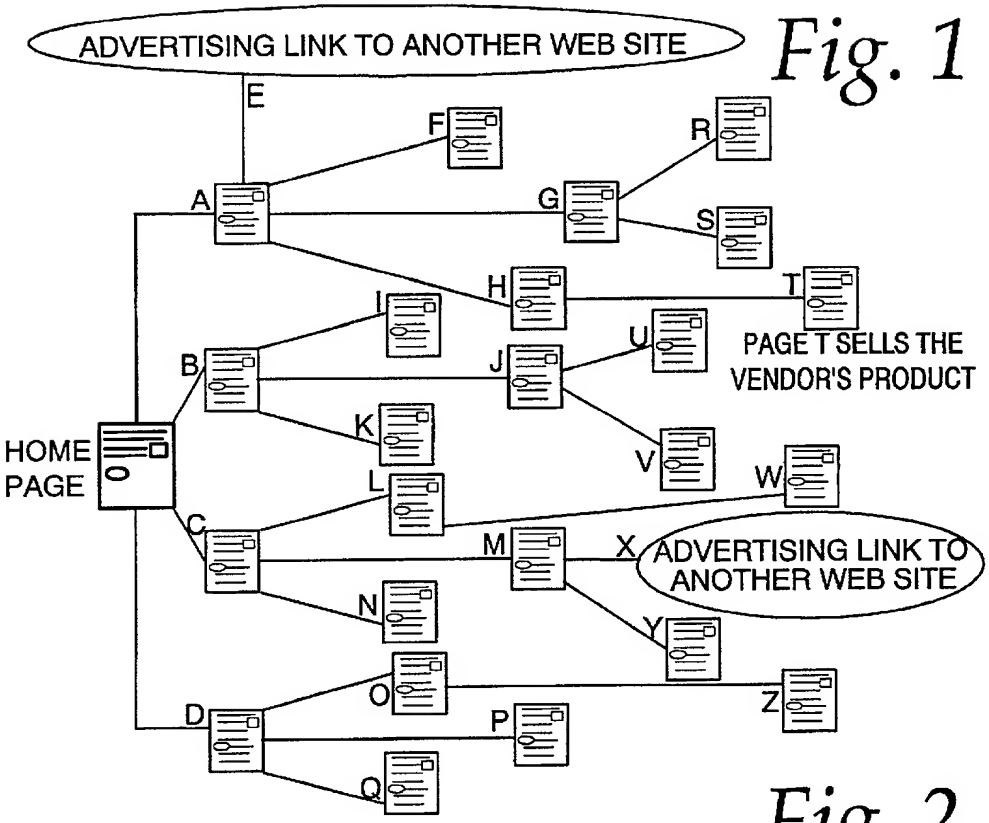

ADVERTISING LINK TO ANOTHER WEB SITE
E
F
R
A
G
S
H
T
I
U
B
J
PAGE T SELLS THE VENDOR'S PRODUCT
K
HOME PAGE
V
W
L
C
M
X
ADVERTISING LINK TO ANOTHER WEB SITE
N
Y
O
Z
D
P
Q

Fig. 1

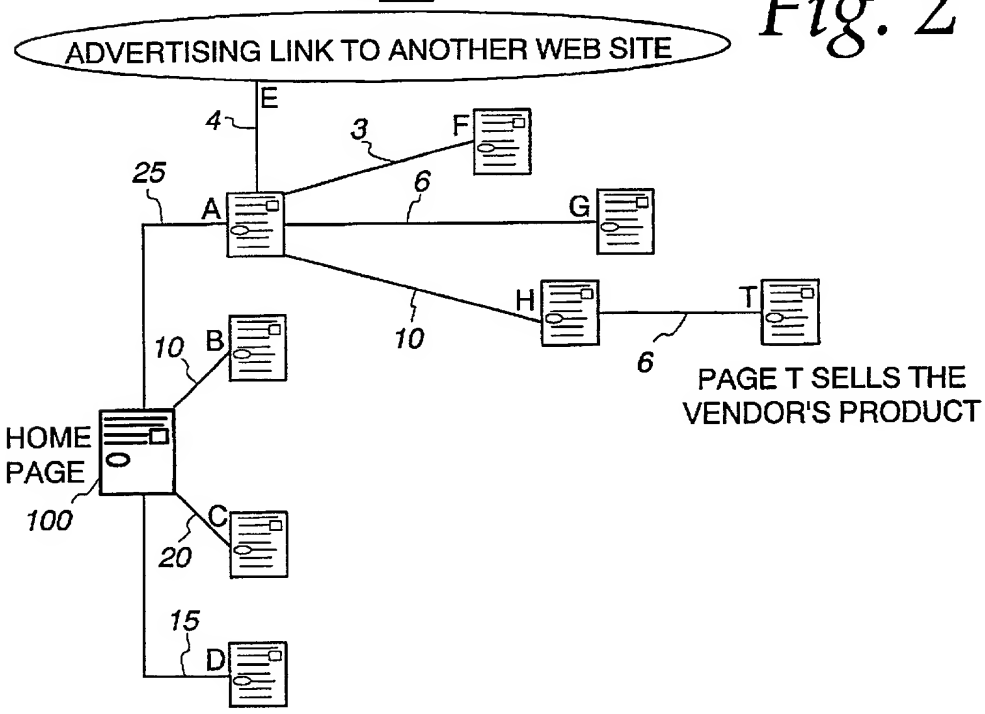

ADVERTISING LINK TO ANOTHER WEB SITE
E
4
3
F
25
6
A
G
H
T
10
10
6
B
PAGE T SELLS THE VENDOR'S PRODUCT
HOME PAGE
100
C
20
15
D

Fig. 2

Fig. 3

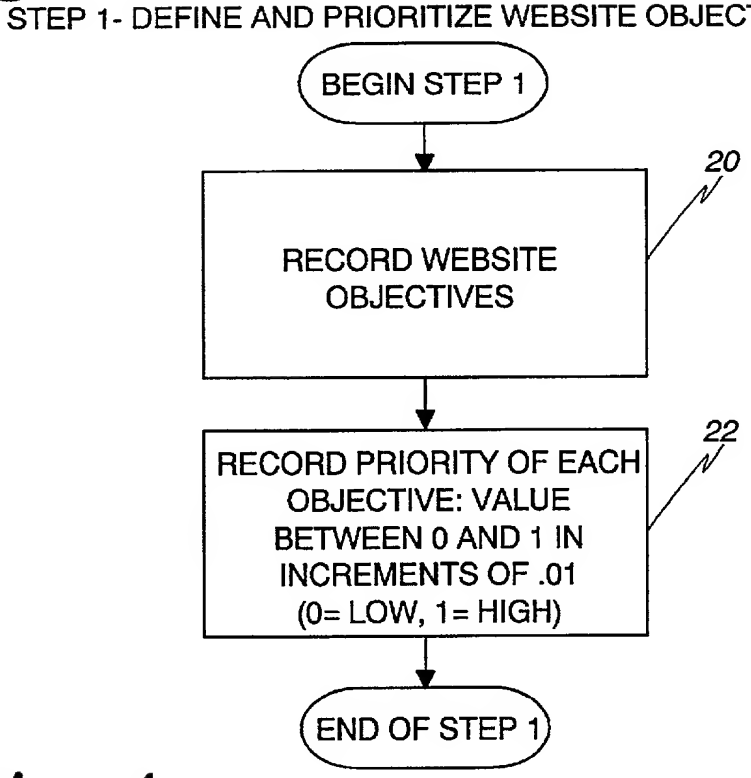

STEP 1- DEFINE AND PRIORITIZE WEBSITE OBJECTIVES
BEGIN STEP 1
20
RECORD WEBSITE OBJECTIVES
22
RECORD PRIORITY OF EACH OBJECTIVE: VALUE BETWEEN 0 AND 1 IN INCREMENTS OF .01 (0= LOW, 1= HIGH)
END OF STEP 1

Fig. 4

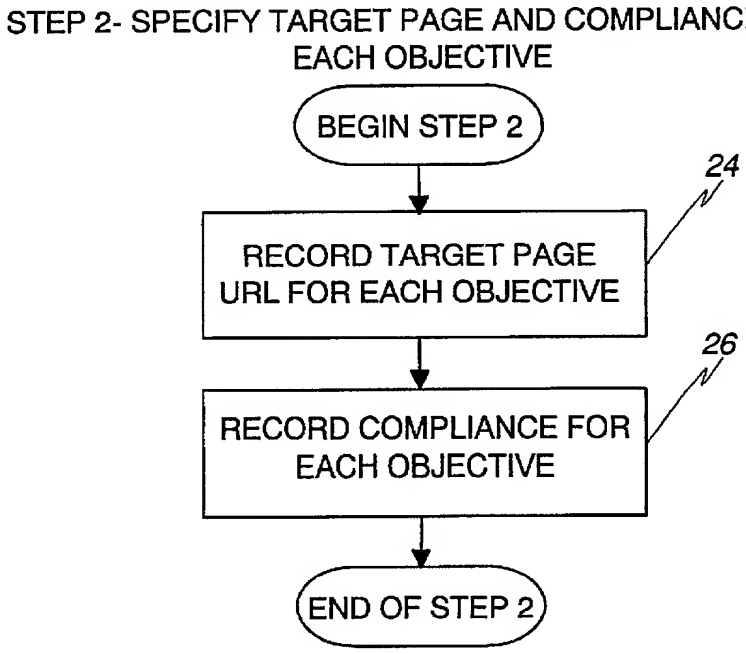

STEP 2- SPECIFY TARGET PAGE AND COMPLIANCE FOR EACH OBJECTIVE
BEGIN STEP 2
24
RECORD TARGET PAGE URL FOR EACH OBJECTIVE
26
RECORD COMPLIANCE FOR EACH OBJECTIVE
END OF STEP 2

Fig. 5

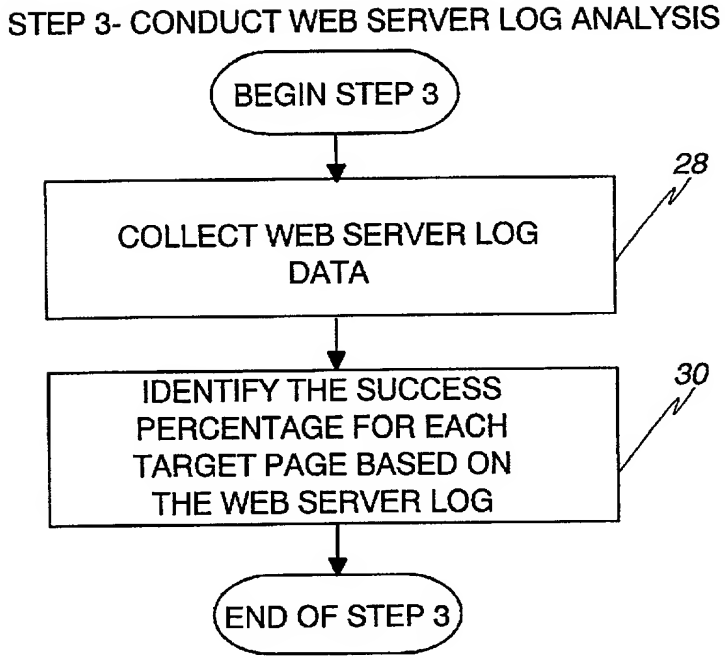

STEP 3- CONDUCT WEB SERVER LOG ANALYSIS
BEGIN STEP 3
COLLECT WEB SERVER LOG DATA
28
IDENTIFY THE SUCCESS PERCENTAGE FOR EACH TARGET PAGE BASED ON THE WEB SERVER LOG
30
END OF STEP 3

Fig. 6

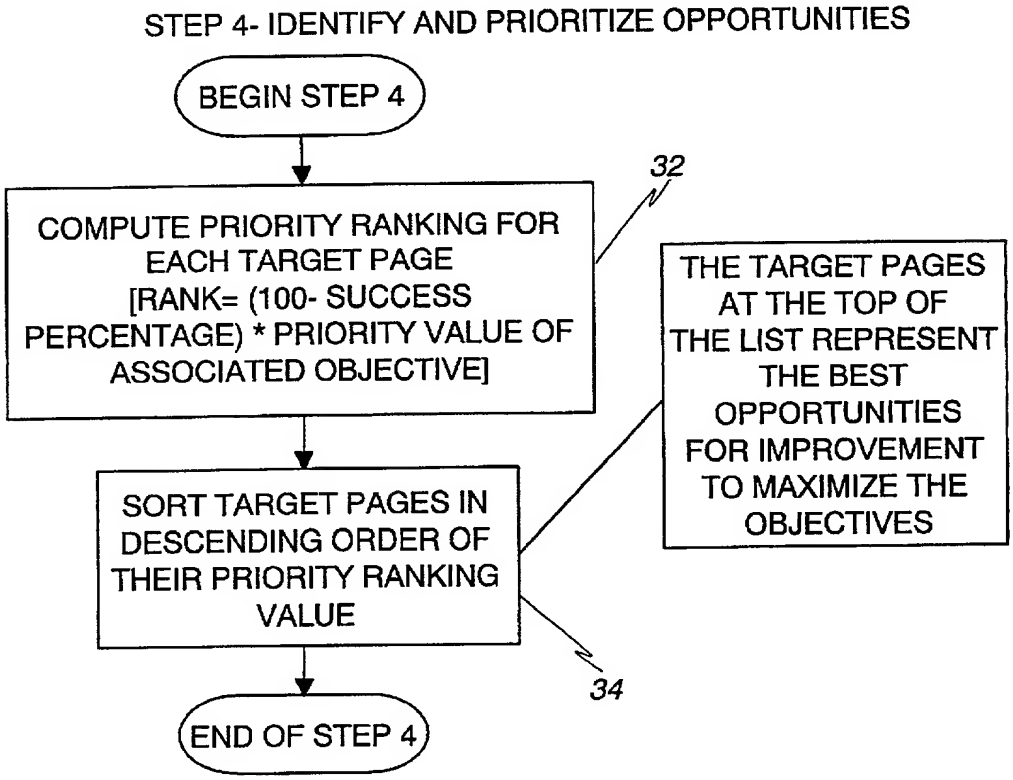

STEP 4- IDENTIFY AND PRIORITIZE OPPORTUNITIES
BEGIN STEP 4
COMPUTE PRIORITY RANKING FOR EACH TARGET PAGE [RANK= (100- SUCCESS PERCENTAGE) * PRIORITY VALUE OF ASSOCIATED OBJECTIVE]
32
SORT TARGET PAGES IN DESCENDING ORDER OF THEIR PRIORITY RANKING VALUE
34
THE TARGET PAGES AT THE TOP OF THE LIST REPRESENT THE BEST OPPORTUNITIES FOR IMPROVEMENT TO MAXIMIZE THE OBJECTIVES
END OF STEP 4

Fig. 7

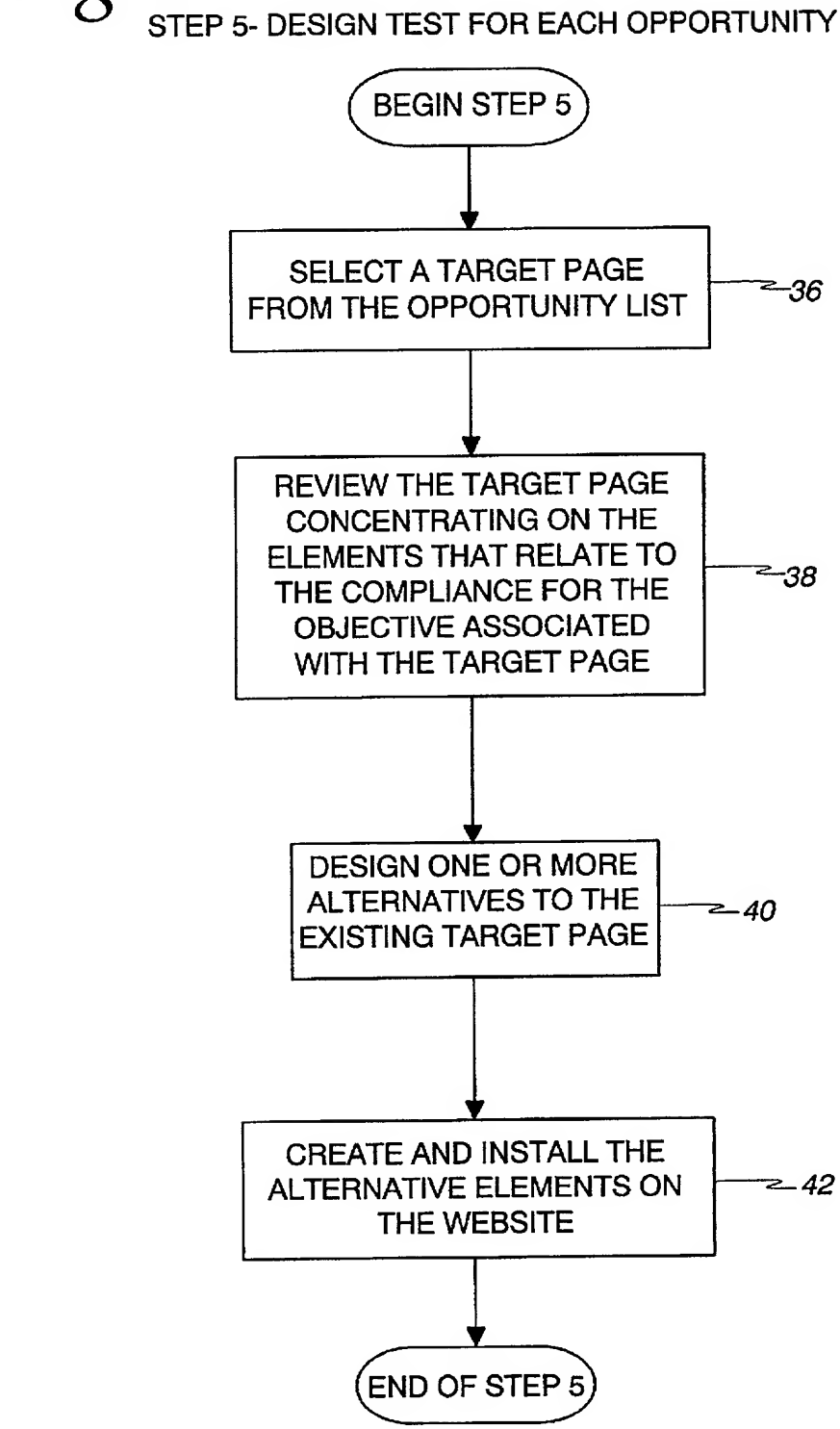
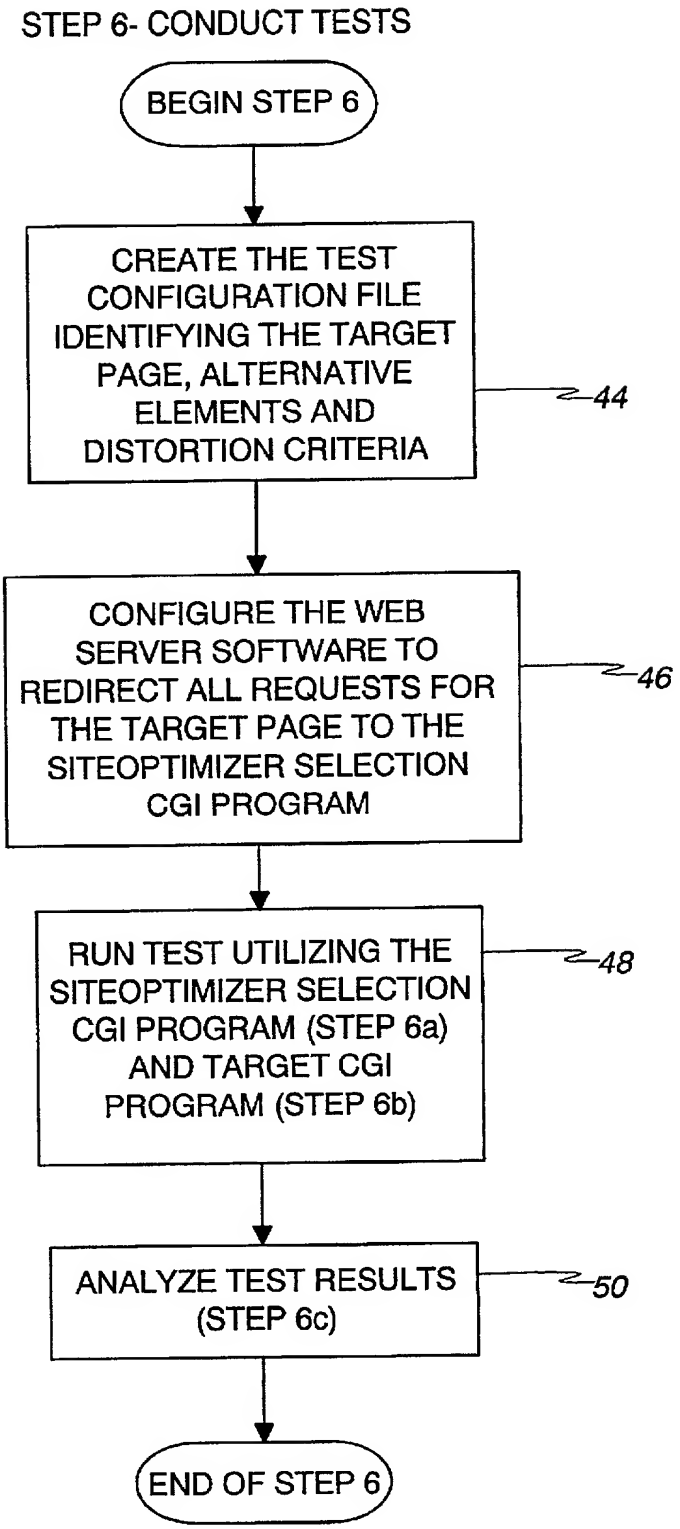

STEP 5- DESIGN TEST FOR EACH OPPORTUNITY
BEGIN STEP 5
SELECT A TARGET PAGE FROM THE OPPORTUNITY LIST
36
REVIEW THE TARGET PAGE CONCENTRATING ON THE ELEMENTS THAT RELATE TO THE COMPLIANCE FOR THE OBJECTIVE ASSOCIATED WITH THE TARGET PAGE
38
DESIGN ONE OR MORE ALTERNATIVES TO THE EXISTING TARGET PAGE
40
CREATE AND INSTALL THE ALTERNATIVE ELEMENTS ON THE WEBSITE
42
END OF STEP 5

Fig. 8


STEP 6- CONDUCT TESTS
BEGIN STEP 6
CREATE THE TEST CONFIGURATION FILE IDENTIFYING THE TARGET PAGE, ALTERNATIVE ELEMENTS AND DISTORTION CRITERIA
44
CONFIGURE THE WEB SERVER SOFTWARE TO REDIRECT ALL REQUESTS FOR THE TARGET PAGE TO THE SITEOPTIMIZER SELECTION CGI PROGRAM
46
RUN TEST UTILIZING THE SITEOPTIMIZER SELECTION CGI PROGRAM (STEP 6a) AND TARGET CGI PROGRAM (STEP 6b)
48
ANALYZE TEST RESULTS (STEP 6c)
50
END OF STEP 6

STEP 6a- SITEOPTIMIZER SELECTION CGI PROGRAM

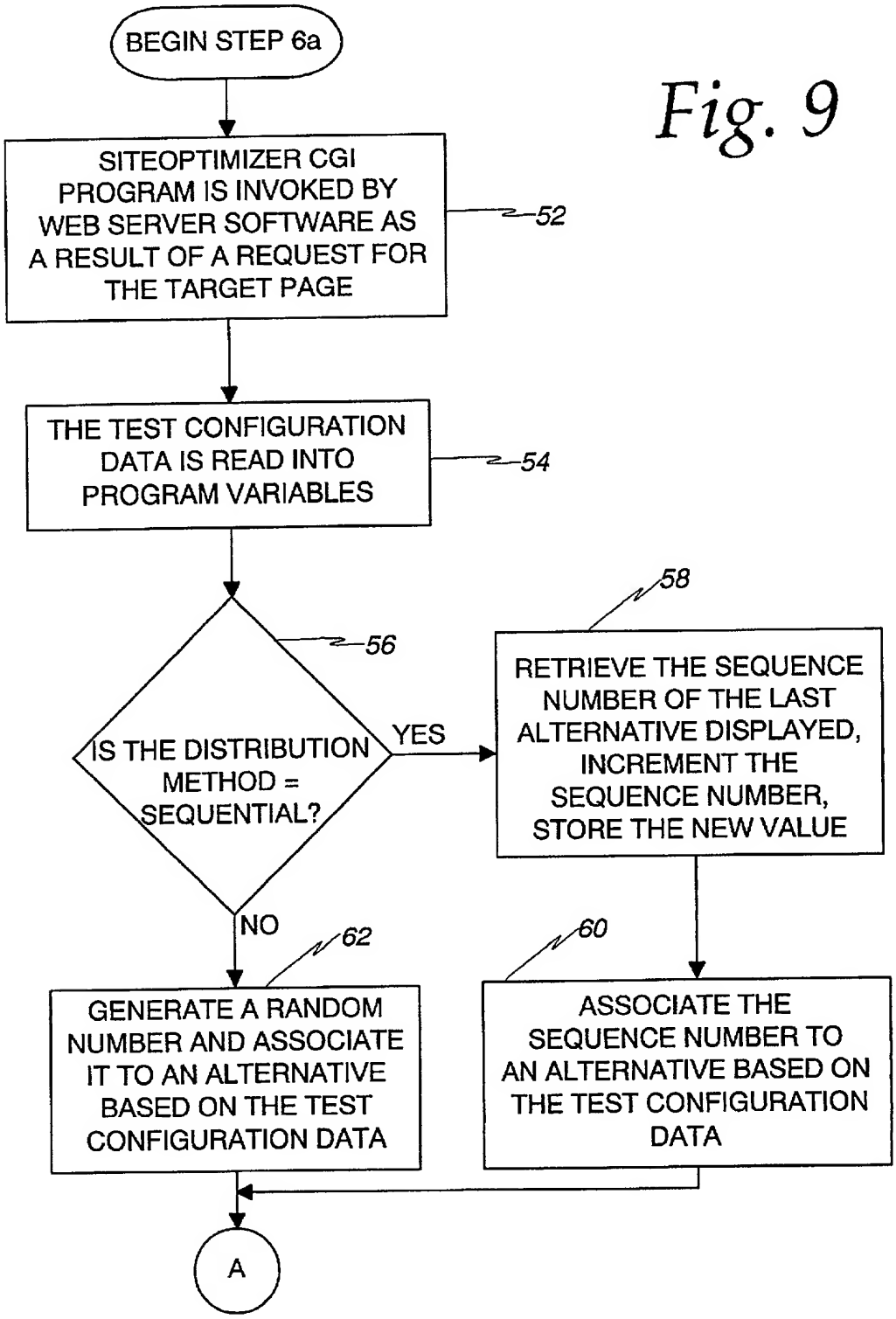


Fig. 9

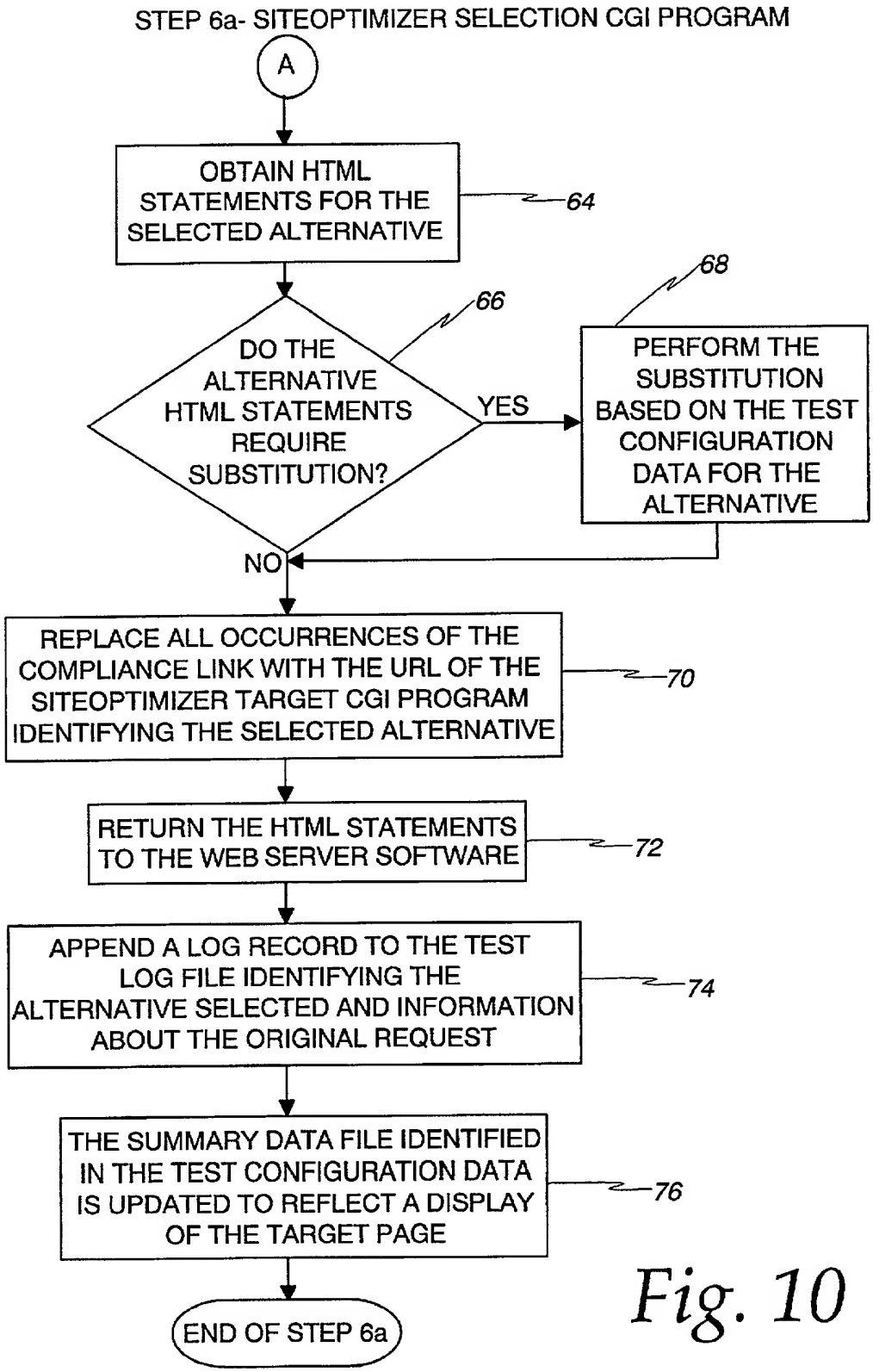

STEP 6a- SITEOPTIMIZER SELECTION CGI PROGRAM
A
OBTAIN HTML STATEMENTS FOR THE SELECTED ALTERNATIVE
64
DO THE ALTERNATIVE HTML STATEMENTS REQUIRE SUBSTITUTION?
66
YES
68
PERFORM THE SUBSTITUTION BASED ON THE TEST CONFIGURATION DATA FOR THE ALTERNATIVE
NO
REPLACE ALL OCCURRENCES OF THE COMPLIANCE LINK WITH THE URL OF THE SITEOPTIMIZER TARGET CGI PROGRAM IDENTIFYING THE SELECTED ALTERNATIVE
70
RETURN THE HTML STATEMENTS TO THE WEB SERVER SOFTWARE
72
APPEND A LOG RECORD TO THE TEST LOG FILE IDENTIFYING THE ALTERNATIVE SELECTED AND INFORMATION ABOUT THE ORIGINAL REQUEST
74
THE SUMMARY DATA FILE IDENTIFIED IN THE TEST CONFIGURATION DATA IS UPDATED TO REFLECT A DISPLAY OF THE TARGET PAGE
76
END OF STEP 6a

Fig. 10

STEP 6b- SITEOPTIMIZER TARGET CGI PROGRAM

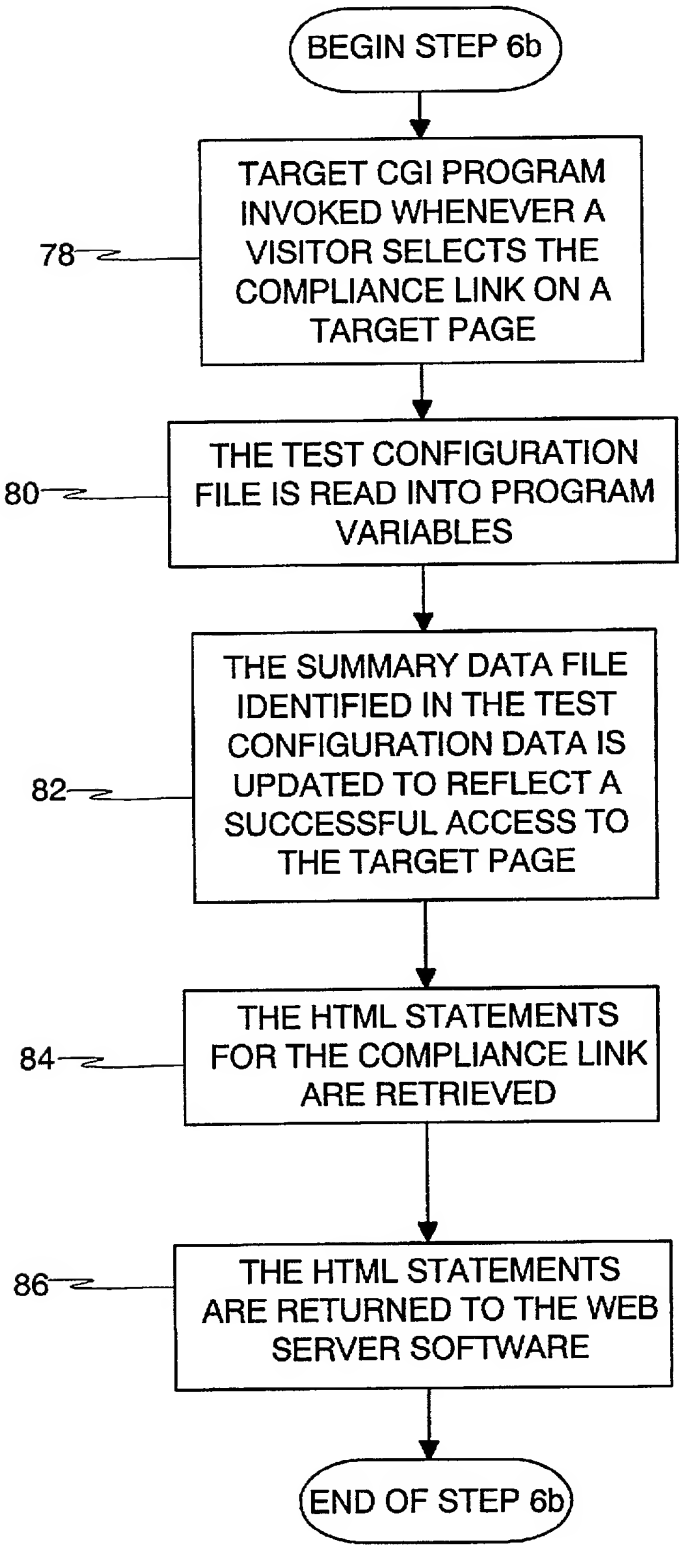


Fig. 11

STEP 6c- ANALYZE TEST RESULTS

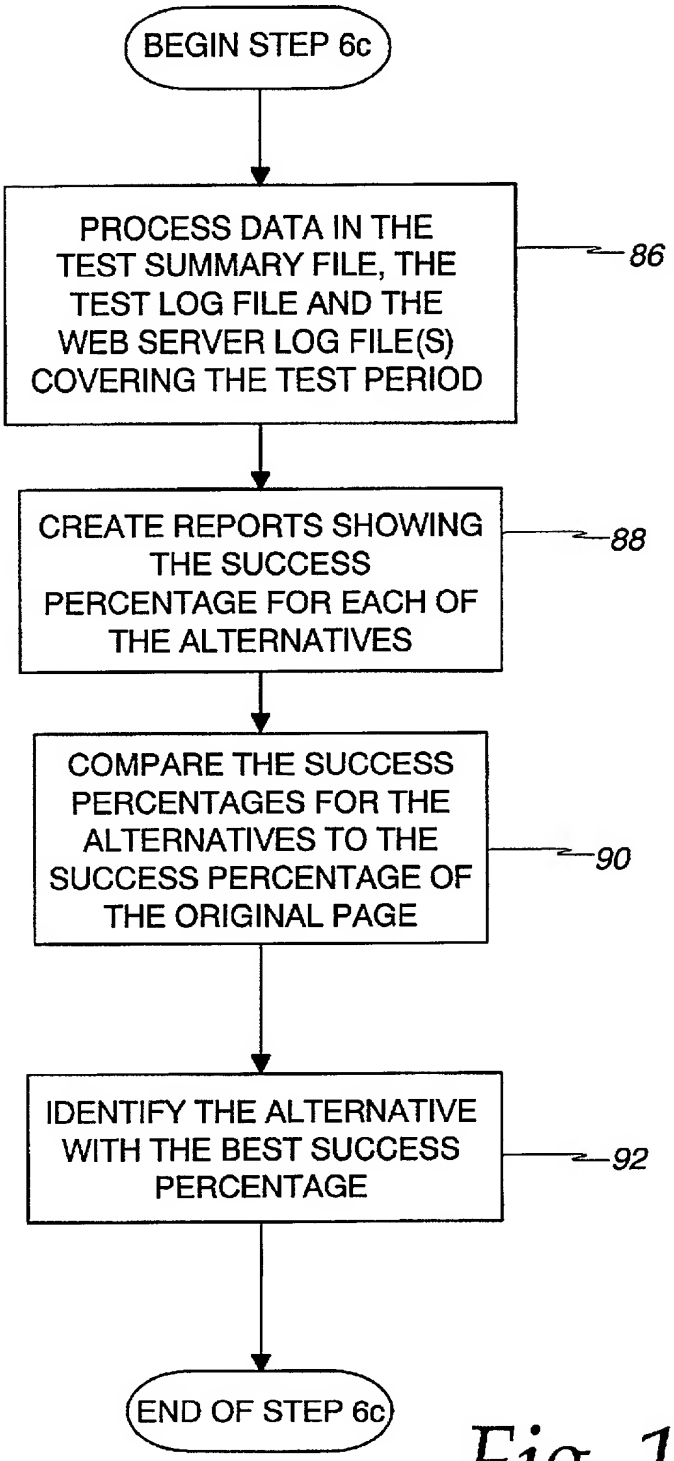


Fig. 12

STEP 7- IMPLEMENT IMPROVED ALTERNATIVES

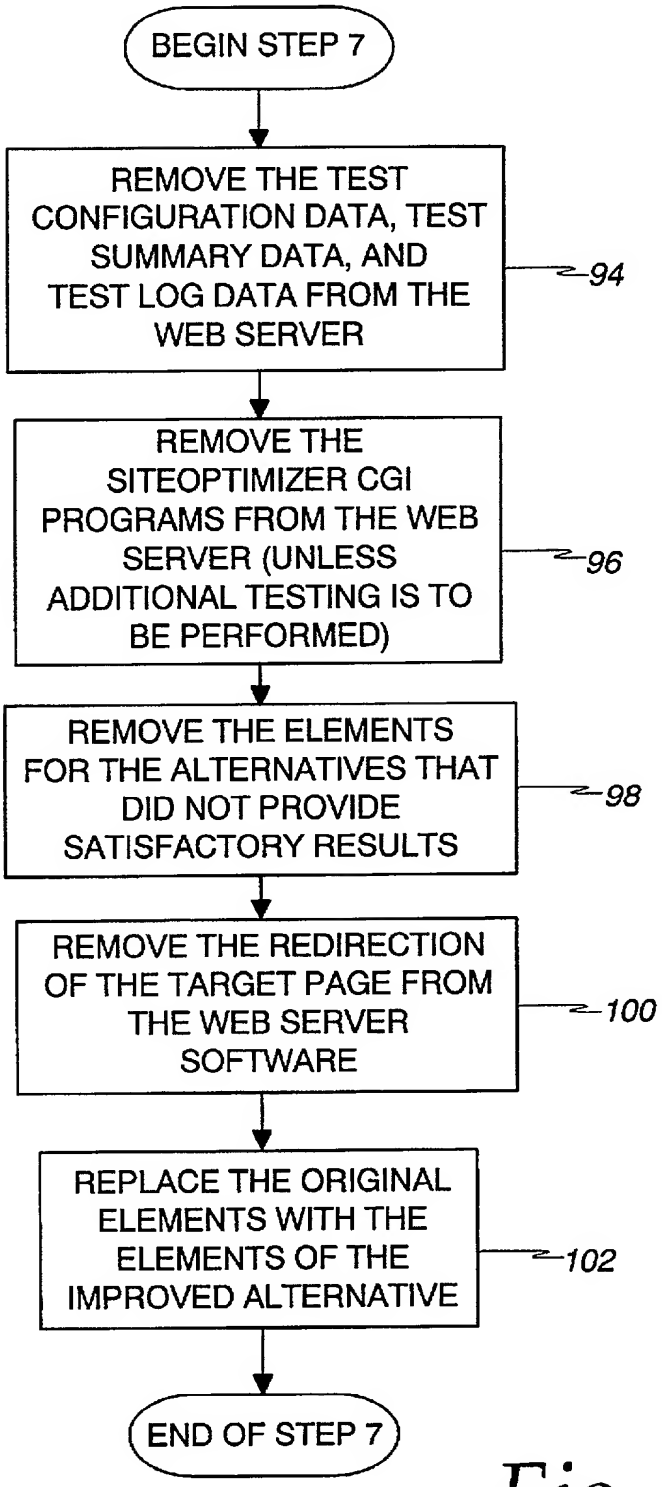


Fig. 13

Fig. 14

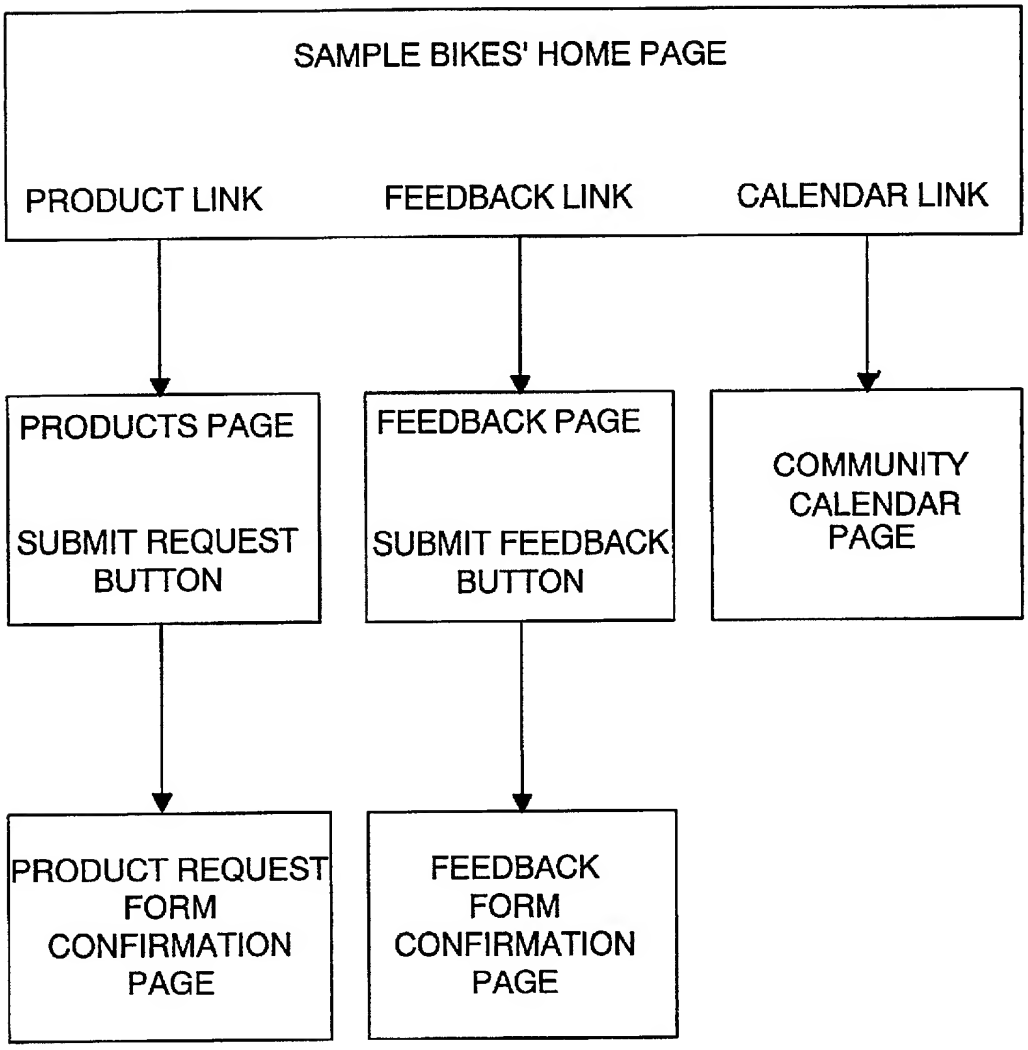

SAMPLE BIKES' HOME PAGE
PRODUCT LINK
FEEDBACK LINK
CALENDAR LINK
PRODUCTS PAGE
SUBMIT REQUEST BUTTON
FEEDBACK PAGE
SUBMIT FEEDBACK BUTTON
COMMUNITY CALENDAR PAGE
PRODUCT REQUEST FORM CONFIRMATION PAGE
FEEDBACK FORM CONFIRMATION PAGE

Fig. 15

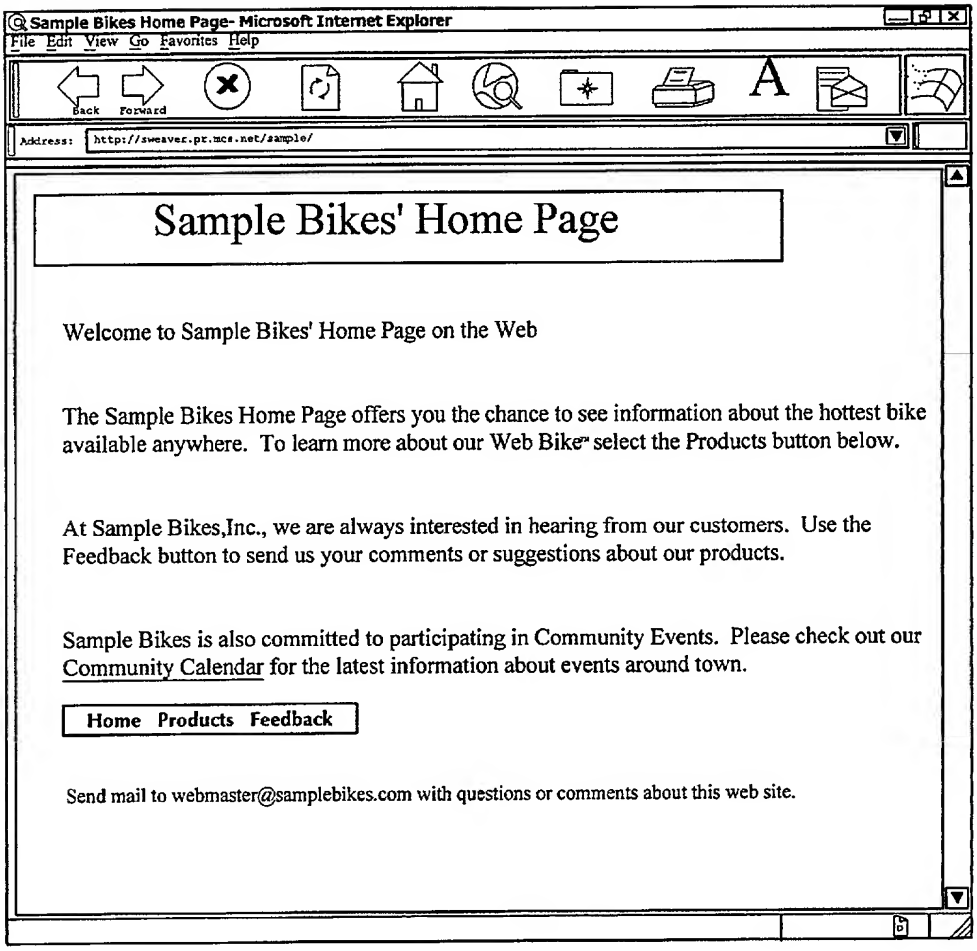

Sample Bikes Home Page- Microsoft Internet Explorer
File Edit View Go Favorites Help
Back
Forward
Address:
http://sweaver.pr.mcs.net/sample/
Sample Bikes' Home Page
Welcome to Sample Bikes' Home Page on the Web
The Sample Bikes Home Page offers you the chance to see information about the hottest bike available anywhere. To learn more about our Web Bike™ select the Products button below.
At Sample Bikes,Inc., we are always interested in hearing from our customers. Use the Feedback button to send us your comments or suggestions about our products.
Sample Bikes is also committed to participating in Community Events. Please check out our Community Calendar for the latest information about events around town.
Home Products Feedback
Send mail to webmaster@samplebikes.com with questions or comments about this web site.

Fig. 16

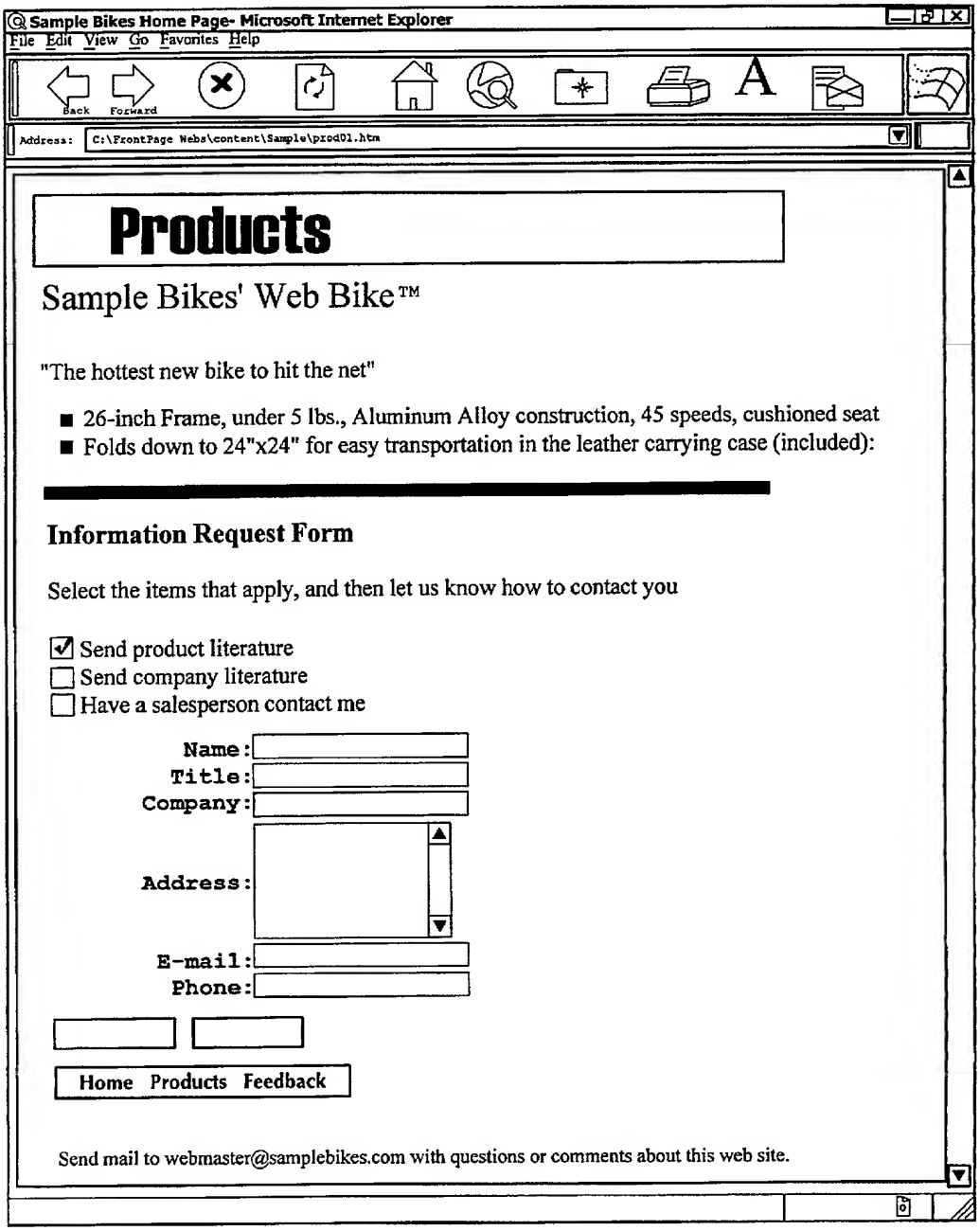

Sample Bikes Home Page- Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward
Address: C:\FrontPage Webs\content\Sample\prod01.htm
Products
Sample Bikes' Web Bike™
"The hottest new bike to hit the net"
26-inch Frame, under 5 lbs., Aluminum Alloy construction, 45 speeds, cushioned seat
Folds down to 24"x24" for easy transportation in the leather carrying case (included):
Information Request Form
Select the items that apply, and then let us know how to contact you
Send product literature
Send company literature
Have a salesperson contact me
Name:
Title:
Company:
Address:
E-mail:
Phone:
Home Products Feedback
Send mail to webmaster@samplebikes.com with questions or comments about this web site.

Fig. 17

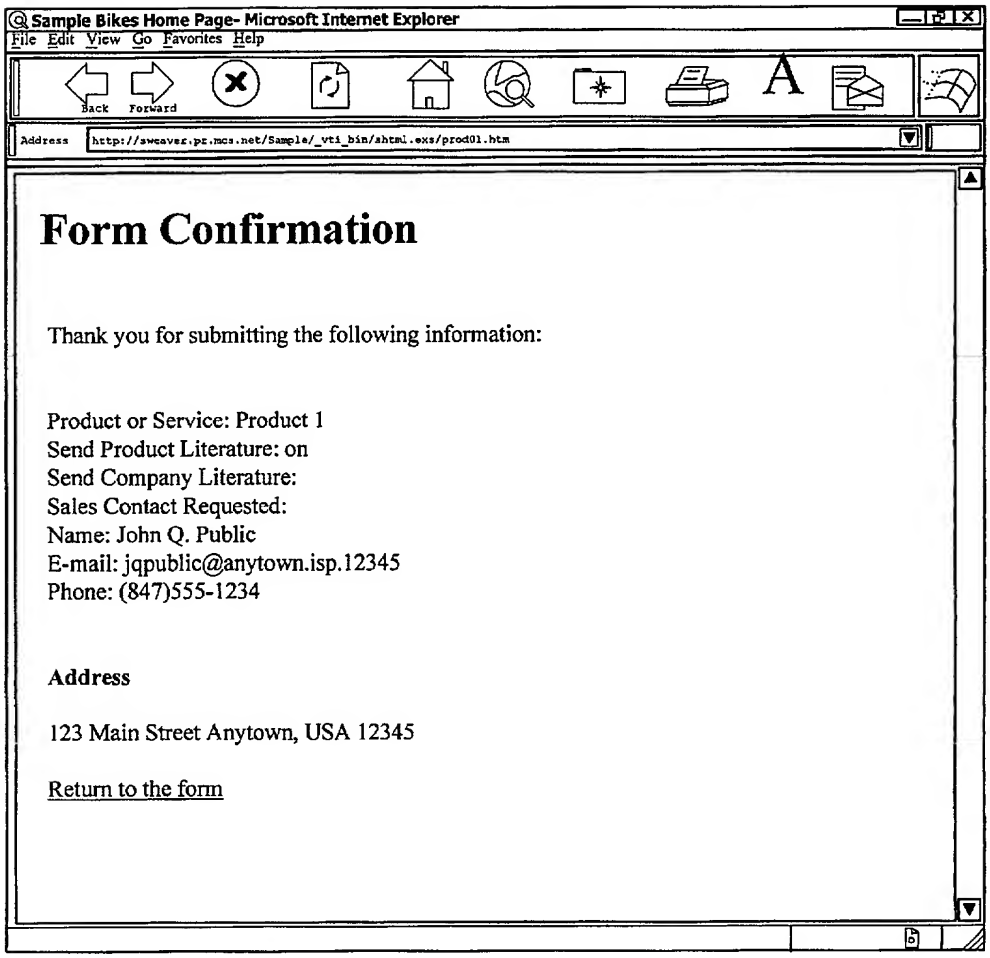

Sample Bikes Home Page- Microsoft Internet Explorer
File Edit View Go Favorites Help
Back
Forward
Address
http://sweaver.pr.mcs.net/Sample/_vti_bin/shtml.exs/prod01.htm
Form Confirmation
Thank you for submitting the following information:
Product or Service: Product 1
Send Product Literature: on
Send Company Literature:
Sales Contact Requested:
Name: John Q. Public
E-mail: jqpublic@anytown.isp.12345
Phone: (847)555-1234
Address
123 Main Street Anytown, USA 12345
Return to the form

Fig. 18

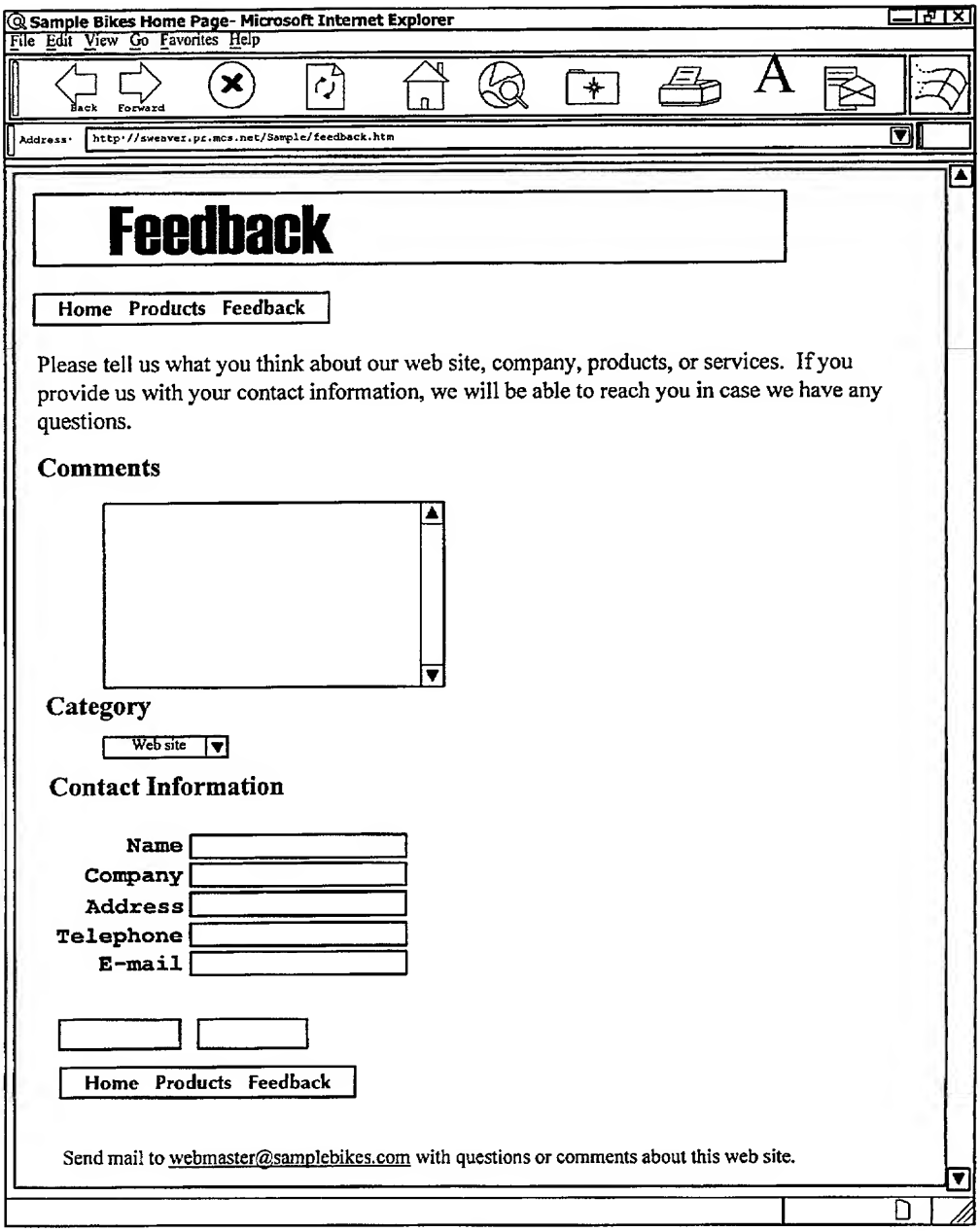

Sample Bikes Home Page- Microsoft Internet Explorer
File Edit View Go Favorites Help
Back
Forward
Address
http://sweavez.pc.mcs.net/Sample/feedback.htm
Feedback
Home Products Feedback
Please tell us what you think about our web site, company, products, or services. If you provide us with your contact information, we will be able to reach you in case we have any questions.
Comments
Category
Web site
Contact Information
Name
Company
Address
Telephone
E-mail
Home Products Feedback
Send mail to webmaster@samplebikes.com with questions or comments about this web site.

Fig. 19

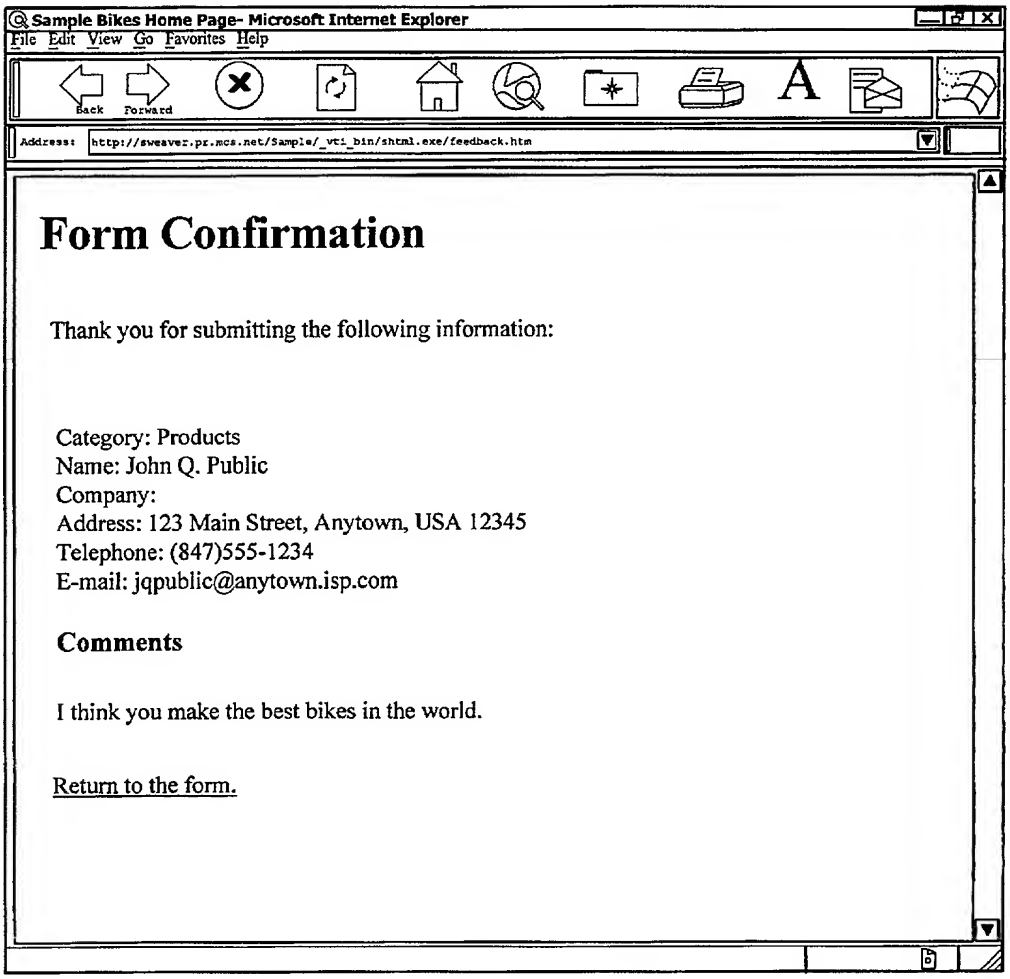
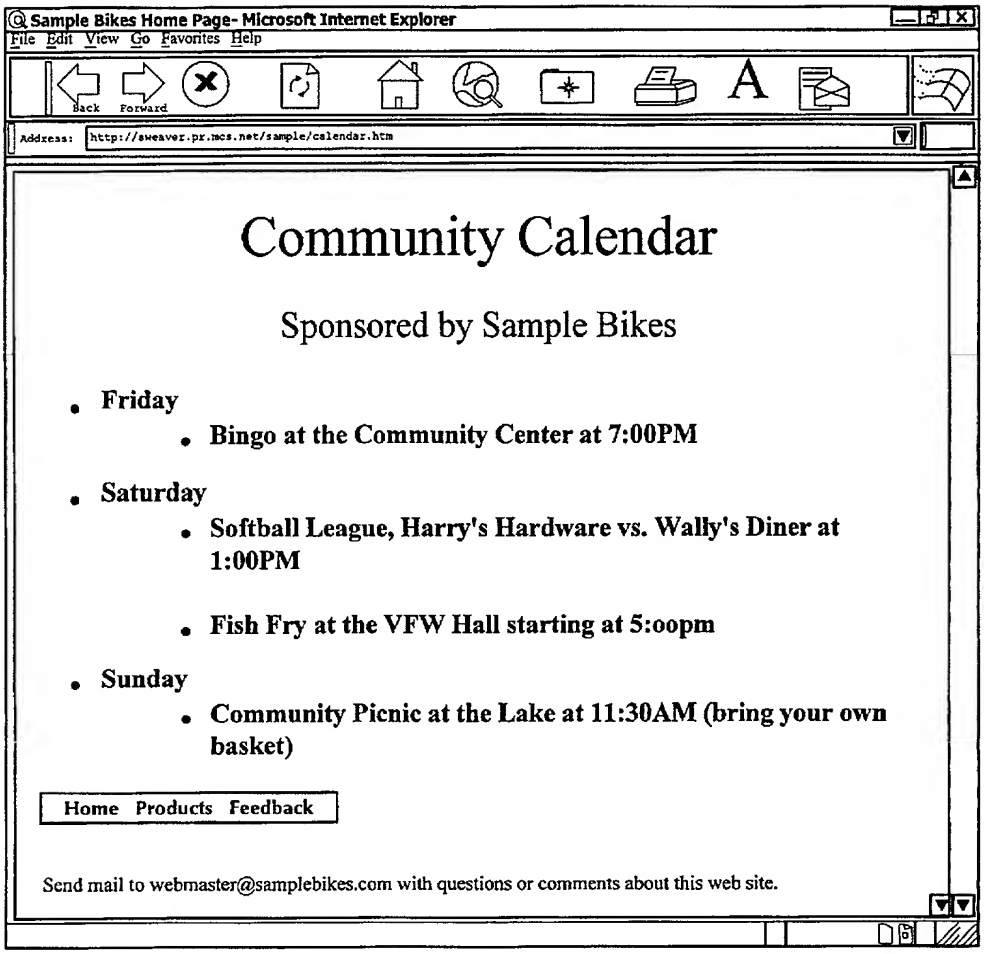

Sample Bikes Home Page- Microsoft Internet Explorer
File Edit View Go Favorites Help
Back
Forward
Address: http://sweaver.pr.mcs.net/Sample/_vti_bin/shtml.exe/feedback.htm
Form Confirmation
Thank you for submitting the following information:
Category: Products
Name: John Q. Public
Company:
Address: 123 Main Street, Anytown, USA 12345
Telephone: (847)555-1234
E-mail: jqpublic@anytown.isp.com
Comments
I think you make the best bikes in the world.
Return to the form.

Fig. 20


Sample Bikes Home Page- Microsoft Internet Explorer
File Edit View Go Favorites Help
Back
Forward
Address: http://sweaver.pr.mcs.net/sample/calendar.htm
Community Calendar
Sponsored by Sample Bikes
Friday
Bingo at the Community Center at 7:00PM
Saturday
Softball League, Harry's Hardware vs. Wally's Diner at 1:00PM
Fish Fry at the VFW Hall starting at 5:oopm
Sunday
Community Picnic at the Lake at 11:30AM (bring your own basket)
Home Products Feedback
Send mail to webmaster@samplebikes.com with questions or comments about this web site.

```
dev179.crown.icongrp.com - - [04/Sep/1996:06:57:34 -0500] "GET /careers.htm HTTP/1.0" 200 9251
sweaver.pr.mcs.net - - [04/Sep/1996:08:35:06 -0500] "GET /corpalt1.htm HTTP/1.0" 200 2105
sweaver.pr.mcs.net - - [04/Sep/1996:08:35:18 -0500] "GET /index1.gif HTTP/1.0" 200 16633
sweaver.pr.mcs.net - - [04/Sep/1996:08:35:30 -0500] "GET /corpinfo.htm HTTP/1.0" 302 -
sweaver.pr.mcs.net - - [04/Sep/1996:08:35:31 -0500] "GET /select1.pl HTTP/1.0" 200 4465
sweaver.pr.mcs.net - - [04/Sep/1996:08:47:57 -0500] "GET /corpalt2.htm HTTP/1.0" 200 2250
sweaver.pr.mcs.net - - [04/Sep/1996:08:48:18 -0500] "GET /corpalt3.htm HTTP/1.0" 200 4227
sweaver.pr.mcs.net - - [04/Sep/1996:08:48:34 -0500] "GET /corpalt4htm HTTP/1.0" 404 -
sweaver.pr.mcs.net - - [04/Sep/1996:08:48:51 -0500] "GET /corpalt4.htm HTTP/1.0" 200 4443
sweaver.pr.mcs.net - - [04/Sep/1996:08:49:27 -0500] "GET /index.htm HTTP/1.0" 200 2997
sweaver.pr.mcs.net - - [04/Sep/1996:08:49:40 -0500] "GET /index1.gif HTTP/1.0" 200 16633
sweaver.pr.mcs.net - - [04/Sep/1996:08:51:20 -0500] "GET /thanks.htm HTTP/1.0" 200 670
sweaver.pr.mcs.net - - [04/Sep/1996:08:51:22 -0500] "GET /index1.jpg HTTP/1.0" 200 5258
sweaver.pr.mcs.net - - [04/Sep/1996:09:06:55 -0500] "GET / HTTP/1.0" 200 3027
sweaver.pr.mcs.net - - [04/Sep/1996:09:07:04 -0500] "GET /images/index1.gif HTTP/1.0" 200 16633
sweaver.pr.mcs.net - - [04/Sep/1996:09:07:37 -0500] "GET /corpinfo.htm HTTP/1.0" 302 -
sweaver.pr.mcs.net - - [04/Sep/1996:09:07:38 -0500] "GET /select1.pl HTTP/1.0" 200 2181
sweaver.pr.mcs.net - - [04/Sep/1996:09:09:34 -0500] "GET /select1.pl HTTP/1.0" 200 2272
sweaver.pr.mcs.net - - [04/Sep/1996:09:10:11 -0500] "GET /select1.pl HTTP/1.0" 200 4249
sweaver.pr.mcs.net - - [04/Sep/1996:09:10:53 -0500] "GET /select1.pl HTTP/1.0" 200 4465
sweaver.pr.mcs.net - - [04/Sep/1996:09:11:48 -0500] "GET /thanks.htm HTTP/1.0" 200 823
sweaver.pr.mcs.net - - [04/Sep/1996:09:43:06 -0500] "GET /thanks.htm HTTP/1.0" 200 841
sweaver.pr.mcs.net - - [04/Sep/1996:09:43:17 -0500] "GET /images/index1.gif HTTP/1.0" 200 16633
sweaver.pr.mcs.net - - [04/Sep/1996:09:43:43 -0500] "GET / HTTP/1.0" 200 3045
www-m0.proxy.aol.com - - [04/Sep/1996:10:13:46 -0500] "GET / HTTP/1.0" 200 3045
www-m0.proxy.aol.com - - [04/Sep/1996:10:13:51 -0500] "GET /images/index1.gif HTTP/1.0" 16633
www-m0.proxy.aol.com - - [04/Sep/1996:10:14:45 -0500] "GET /index.htm HTTP/1.0" 200 3045
```

Fig. 21A1

```
www-m0.proxy.aol.com - - [04/Sep/1996:10:16:11 -0500] "GET /corpinfo.htm HTTP/1.0" 302 -
www-m0.proxy.aol.com - - [04/Sep/1996:10:16:14 -0500] "GET /select1.pl HTTP/1.0" 200 2199
www-m0.proxy.aol.com - - [04/Sep/1996:10:17:11 -0500] "GET /careers.htm HTTP/1.0" 304 -
ns.infores.com - - [04/Sep/1996:10:17:12 -0500] "GET / HTTP/1.0" 200 3045
ns.infores.com - - [04/Sep/1996:10:17:25 -0500] "GET /images/index1.gif HTTP/1.0" 200 16633
ns.infores.com - - [04/Sep/1996:10:17:55 -0500] "GET /careers.htm HTTP/1.0" 200 9251
www.m0.proxy.aol.com - - [04/Sep/1996:10:18:32 -0500] "GET /dvlpclnt.htm HTTP/1.0" 302 -
www.m0.proxy.aol.com - - [04/Sep/1996:10:18:35 -0500] "GET /select2.pl HTTP/1.0" 200 3680
ns.infores.com - - [04/Sep/1996:10:18:39 -0500] "GET /corpinfo.htm HTTP/1.0" 302 -
ns.infores.com - - [04/Sep/1996:10:18:40 -0500] "GET /select1.pl HTTP/1.0" 200 2272
ns.infores.com - - [04/Sep/1996:10:19:09 -0500] "GET /index.htm HTTP/1.0" 200 3045
ns.infores.com - - [04/Sep/1996:10:19:40 -0500] "GET /partners.htm HTTP/1.0" 200 1655
www-m0.proxy.aol.com - - [04/Sep/1996:10:19:48 -0500] "GET /partners.htm HTTP/1.0" 304 -
ns.infores.com - - [04/Sep/1996:10:19:56] "GET /dvlpclnt.htm HTTP/1.0" 302 -
ns.infores.com - - [04/Sep/1996:10:19:57] "GET /select2.pl HTTP/1.0" 200 2114
www.m0proxy.aol.com - - [04/Sep/1996:10:20:58 -0500] "GET /corpinfo.htm HTTP/1.0" 302 -
lars.cooltech.com - - [04/Sep/1996:11:29:17 -0500] "GET / HTTP/1.0" 200 3045
```

Fig. 21A2

Fig. 21B

Number of Requests Per Filename

File Name (URI)	Number of Requests
/	63
/careers.htm	18
/cgiemail.cgi/netroi/careers.tmp	1
/cgiemail.cgi/netroi/sendinfo.tmp	3
/corpalt1.htm	1
/corpinfo.htm	34
/dvlpclnt.htm	21
/netroi/summary1.pl	1
/partners.htm	19
/private/objctvs.htm	4
/response.htm	2
/select1.pl	55
/select2.pl	18
/sendinfo.htm	7
/showinfo.pl	3
/summary1.pl	3
/summary2.pl	1
/target1.pl?1	2
/target1.pl?2	1
/target1.pl?3	1
/target1.pl?4	1
/thanks.htm	4

Fig. 22

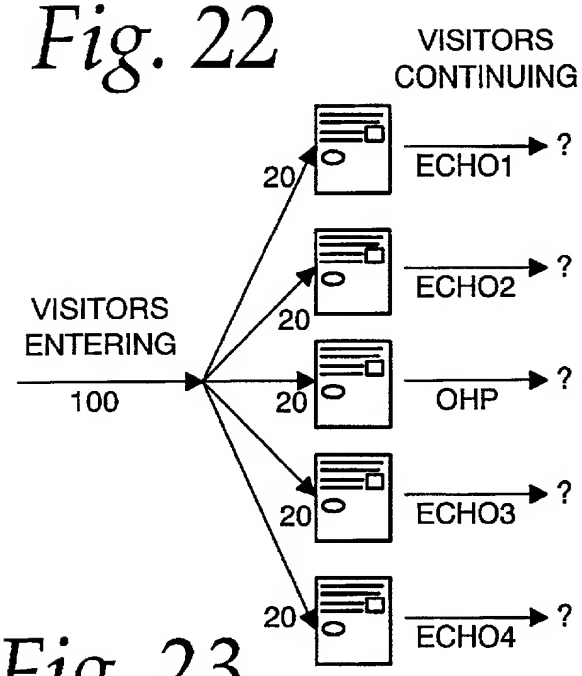


Fig. 23

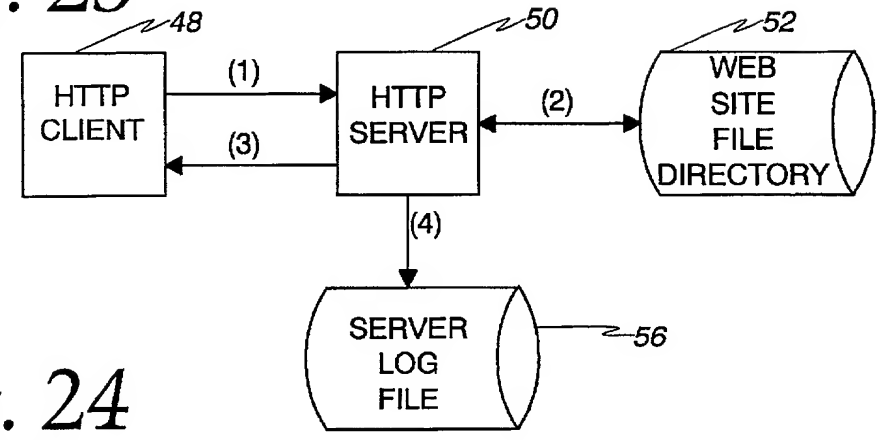


Fig. 24

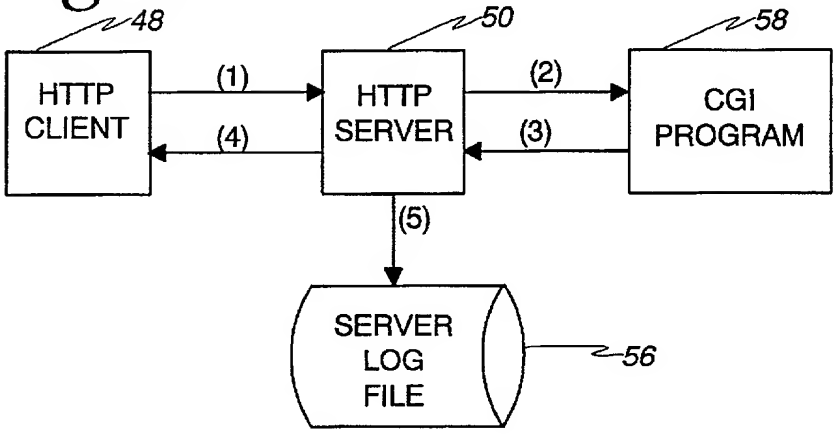


Fig. 25

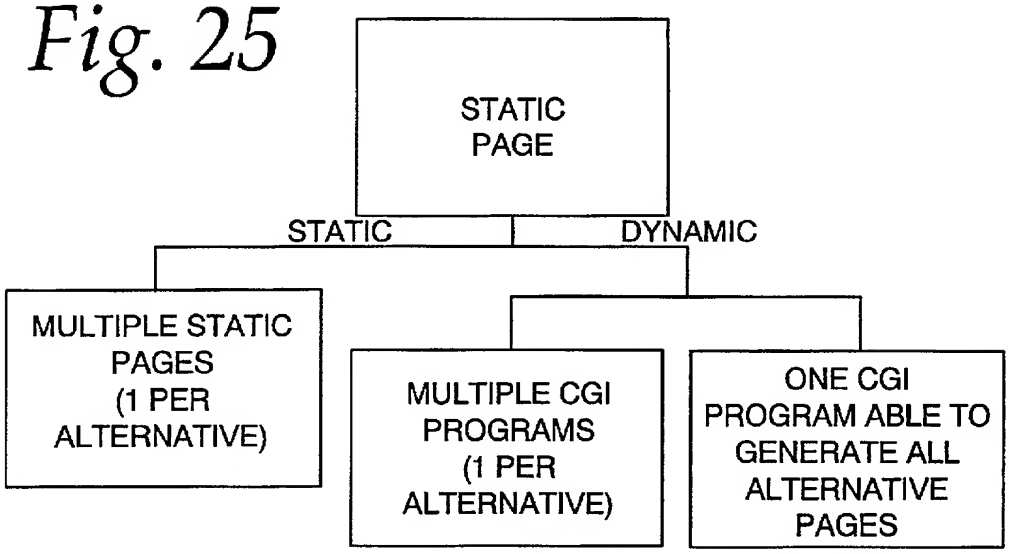


Fig. 26

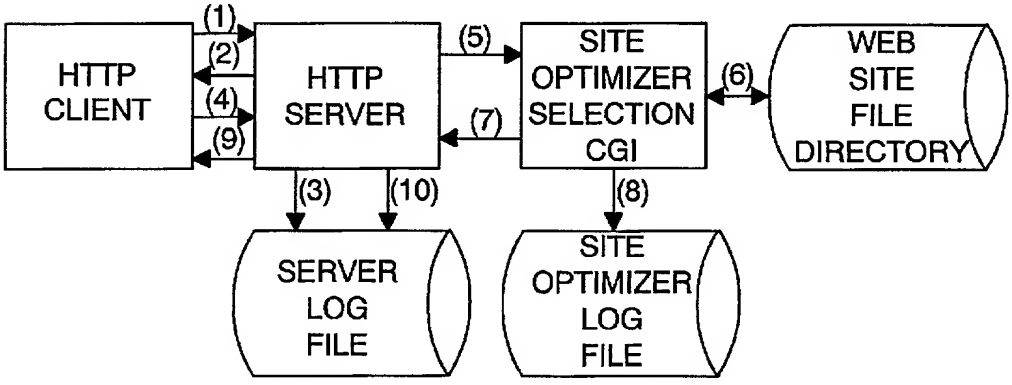
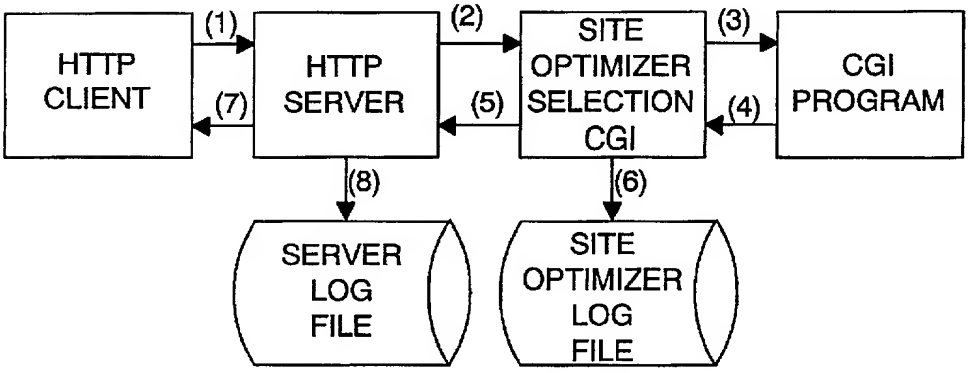



Fig. 27